

Five Unrecorded Species of Geometridae from Korea (Lepidoptera), with Notes on Eight Little known Species.

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ABSTRACT Five unrecorded species of Geometridae from Korea; *Meteima mediorufa gilva*, *Idiotephria evanescens*, *I. debilitata*, *Scopula modicaria*, *Polythrena coloraria* were reported with brief redescriptions and illustration of their genitalia. And eight little known species from Korean peninsula, were listed with collected localities and the range of their distribution.

DESCRIPTION

1. *Meteima mediorufa gilva* Djakonov.

우수리가자나방(신칭)

Petelia mediorufa Bastelberger, 1911, Int. ent. Z. 4 : 294.

Meteima gilva Djakonov, 1952, Ent. Obozr. 32 : 276~278, figs. 7~9.

Dissoplaga mediorufa; Inoue, 1986, Bull. Fac. Domest. Sci. Otsuma Univ. 22 : 252, figs. 49~50.

Meteima mediorufa gilva; Inoue, 1987, Japan Het. Journ. 140 : 232~235.

Wings expanse, 31~35mm. The species was described as a type species of the genus *Meteima* from S. Ussuri by Djakonov(1952), but it was treated as a subspecies of *mediorufa* Bastelberger which was described from Taiwan by Inoue(1987). According to him, the subspecies *gilva* Djakonov is distinguished from the nominate subspecies by paler ground colour of forewing, much weaker central reddish band between ante- and postmedian lines, and a longer horn-like cornutus in aedeagus. Two males were collected on May (date is uncertain) by ULV light trap. The nominate subspecies is distributed

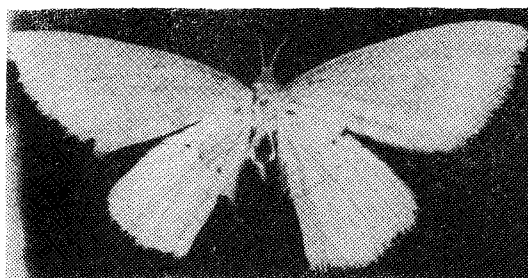


Fig. 1. *Meteima mediorufa gilva* Djakonov

in Taiwan and Japan. But Koreans is identical with the subspecies *gilva* D.

Male genitalia. As shown in figs. 3, and 4. Material examined. 2♂. Yangyang, Kangwŏn Prov., ? V. 1987 (K.T. Park), gen. slide no. 1598.

Distribution. Korea(new record), S.E. Siberia.

2. *Idiotephria evanescens* (Staudinger)

황갈물결자나방(신칭)

Cidaria evanescens Staudinger, 1897, Dt. ent. Z. Iris 10 : 104.

Idiotephria evanescens; Inoue, 1982, in Inoue et al., Moths of Japan 1 : 477, 2 : 279, pl. 69 : 4~5.

Wings expanse, 25~28mm. This species is closely similar to *I. debilitata*, but it can be distinguished from the latter by the postmedian line which strongly angled at Cu₂ on the forewing and at middle on the hindwing.

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Male and female genitalia. As shown in figs. 5~7.

Material examined. 1♂, 1♀, Yangyang, Kangwŏn Prov., ? . V. 1987 (K.T. Park), gen. slide no. 1601 (male) & no. 1603 (female).

Distribution. Korea(new record), Japan, S.E. Siberia.

3. *Idiotephria debilitata* (Leech) 줄점물결자나방(신칭)

Cidaria debilitata Leech, 1891, Entomologist 24. Suppl. : 52.

Idiotephria debilitata; Inoue, 1982, in Inoue et al., Moths of Japan 1 : 478, 2 : 279, pl. 69 : 6~8.

Wings expanse, 26~31mm. This species is the largest one among 3 species of genus *Idiotephria* known from Japan. It has been known that the larva feeds on the leaves of *Quercus* sp. in Japan.

Female genitalia. As shown in figs. 8 and 9.

Material examined. 3♀♀, Yangyang, Kangwŏn Prov., ? . V. 1987 (K.T. Park), gen. slide no. 1602.

Distribution. Korea(new record), Japan, S.E. Siberia.

Host plants. *Quercus* spp. were reported from Japan.

4. *Scopula modicaria* (Leech) 각시에기자나방(신칭)

Acidalia modicaria Leech, 1897, Ann. Mag. nat.Hist. (6)20 : 94.

Acidalia virginaria Imaidzumi, 1941, Tenthredo 3 : 295.

Scopula modicaria; Inoue, 1982, in Moths of Japan 1 : 447, 2 : 271, pl. 62 : 13~16.

Wings expanse, 27mm. Very close to *S. nigropunctata* (H.) in superficial characters, but it is easily separated by the genitalic

characters, especially in male. Only one male was collected.

Male genitalia. As shown in figs. 10 and 11.

Material examined. 1♂, Yangku Kangwŏn Prov., 14. VI. 1987 (K.T. Park), gen. slide no. 1599.

Distribution. Korea (new record), Japan, China, S.E. Siberia.

5. *Polythrena coloraria* Herrich-Schäffer 노랑띠물결자나방(신칭)

Polythrena coloraria Herrich-Schäffer, 1856, Syst. Bearb. Schmett. Eur. 6 : 136 ; Prout, 1914, in Seitz, Macrolep. 4 : 169. pl. 11 : b.

This species has not been well known since it was described. A female was newly collected by sweeping at the top of Kachilbong(1,242m) and it was once listed in the list of the collection which was made in D.M.Z by the first author(1987). Recently a male also was found in the second author's collection.

Material examined, 1♀, Kachilbong, Kangwŏn Prov., 14. VI. 1987(K.T. Park) ; 1♂, Mt. Kyebang, Kangwŏn Prov., 21. VII. 1981 (Y.H. Shin)

Distribution. Korea(new record), Altai, E. Siberia.

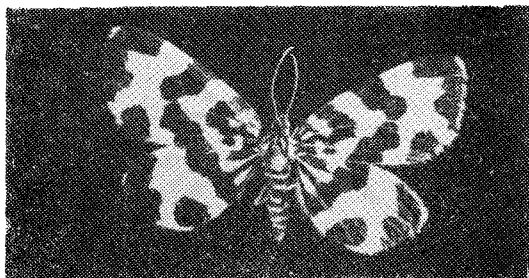


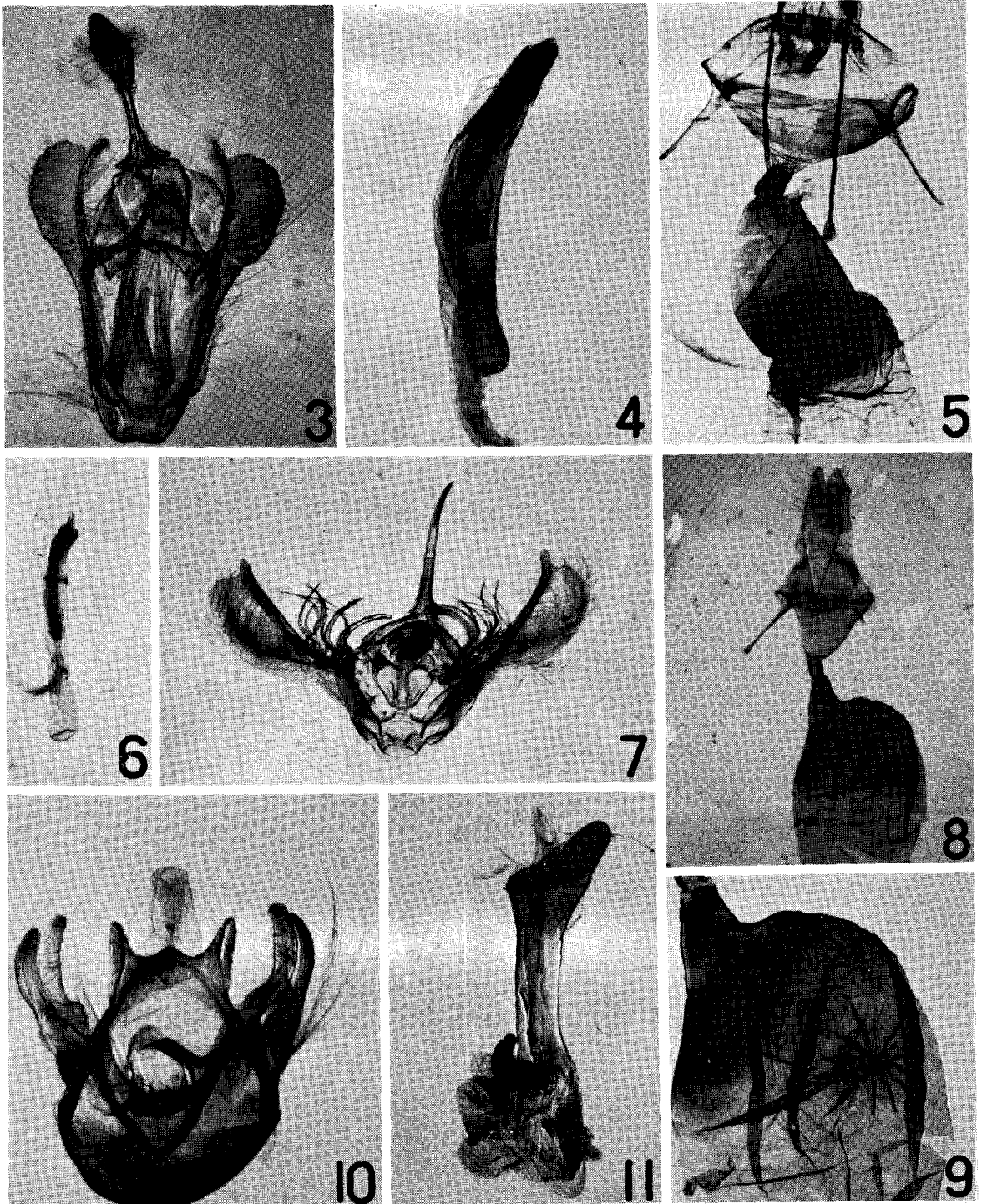
Fig. 2. *Polythrena coloraria* Herrich-Schäffer

Notes on some Little Known Species

Following species which were reported by the previous authors(Leech, 1897 and some others), but their specimens have not been

found and left in uncertainty to date, were recently collected by authors.

1. *Idaea impexa*(Butler) 노랑꼬리애기자나방
Acidalia impexa Butler, 1879, Ann. Mag. nat. Hist. (5)4 : 438.
 Material examined. 1♀, Mt. Hanra, Isl. Jeju (5. VII. 1986).
 Distribution. Korea, Japan, China.
2. *Idaea auricruda*(Butler) 줄굽은애기자나방
Asthena auricruda Butler, 1879, Ann. Mag. nat. Hist. (5)4 : 438.
Acidalia plumloscriptaria Christorh, 1881, Bull. Soc. imp. Nat. Moscow 55(3) : 44.
 Material examined. 1♂ Chugog, Chunsung, Kangwŏn Prov., 30. VII. 1986.
 Distribution. Korea, Japan, China, S.E. Siberia.
3. *Scopula confusa*(Butler) 네점애기자나방
Acidalia confusa Butler, 1878, Ann. Mag. nat. Hist. (5)1 : 400.
 Material examined. 1♂ Mt. Dosol, Kangwŏn Prov., 14. VI. 1987.
 Distribution. Korea, Japan.
4. *Scopula nigropunctata*(Hufnagel) 앞노랑애기자나방
Geometra nigropunctata Hufnagel, 1767, Berl. Mag. 4 : 526.
 Material examined. 1♂ Yangku, Kangwŏn Prov., 14. VI. 1987, gen. slide no. 1600.
 Distribution. Korea, Japan, Palaearctic region.
 Remarks. Three subspecies has been known. Among these, Korean specimens belongs to *imbella*(Warren).
5. *Eramis golda* Diakonov 참나무겨울가자나방
Eramis golda Diakonov, 1929, Ent. Obozr. 23 : 107, figs 1, 2; Inoue, 1982, in Inoue et al., Moths of Japan 1 : 552, 2 : 302, pl. 98 : 23~26, 233~12
Eramis ectroma Prout, 1930, Novit. Zool. 35 : 144.
Eramis rara Inoue, 1955, Kontyu 22 : 76, pl. 7 : 28
 Material examined. Gwangrung, Gyunggi Prov., 1♂. 30. X. 1987, 2♂, 4. XI. 1987.
 Distribution. Korea, Japan, S.E. Siberia
6. *Descoreba simplex* Butler 큰빛줄가자나방(신칭)
Descoreba simplex Butler, 1878, Ann. Mag. nat. Hist. (5)1 : 394 ; Inoue, 1982, in Inoue et al., Moths of Japan 1 : 558, 2 : 304, pl. 101 : 3~6.
Aspilates violentaria Christoph, 1881, Bull. Soc. imp. Nat. Moscow. 55(3) : 82.
Descoreba punctaria Leech, 1897, Ann. Mag. nat. Hist. (6)19 : 319.
 Material examined. Gwangrung, Gyunggi Prov., 4♀, 18. IV. 1987.
 Distribution. Korea, Japan, S.E. Siberia
7. *Colotois pennaria ussuriensis* Bang-Haas 흰점갈색가자나방
Phalaena pennaria Linnaeus, 1761, Fauna Suecica(Ed. 2) : 324
Phalaena pennaria ussuriensis Bang-Haas, 1927, Horaemacrolepid. Reg. palaeartct. 1 : 96, pl. 11 : 32 ; Inoue, 1982, in Inoue et al., Moths of Japan 1 : 558, 2 : 304, pl. 101 : 9~11
 Material examined. Gwangrung, Gyunggi Prov., 1♂, 1♀, 25. X. 1986
 Distribution. Korea, Japan, Siberia, Europe
8. *Pachyligia dolosa* Butler 뒷흰가자나방
Pachyligia dolosa Butler, 1878, Ann. Mag. nat. Hist. (5)1 : 442 ; Inoue, 1982, in Inoue et al., Moths of Japan, 1 : 557, 2 : 304, pl. 101 : 1 & 2
 Material examined. Gwangrung, Gyunggi



Figs. 3. Male genitalia of *Meteima mediorufa gilva* Djakonov. 4. Ditto, aedeagus. 5. Female genitalia of *Idiolephria evanescens*(Staudinger). 6. Ditto, aedeagus. 7. Ditto, male genitalia. 8. Female genitalia of *Idiolephria debilitata*(Leech). 9. Ditto, corpus bursae with signum. 10. Male genitalia of *Scopula modicaria* (Leech). 11. Ditto, aedeagus.

Prov., 18. IV. 1987

Distribution. Korea, Japan.

摘 要

자나방과의 5種 : 우수리가자나방, *Mefeima mediorufa gilva* D., 황갈물결자나방, *Idiotephria evanescens*(S.), 줄점물결자나방, *I. debilitata*(L.), 각시애기자나방, *Scopula modicaria* (L.), 노랑띠각시자나방, *Polythrena coloraria* H.S 등이 우리나라에서는 처음으로 보고되었으며 그외 과거 북한 등지에서 기록되어 왔으나 표본확인이 되지 않았던 8종이 함께 채집 확인되었다.

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